

REMARKS

In the Office Action, the Examiner rejected claims 1-5, 7-13, 15-19, 21-30, and 32-44 under 35 USC §103. Applicant respectfully traverses these rejections.

The claims have been amended to correct various typographical errors and in order to expedite allowance of the pending claims. Applicant reserves the right to re-introduce claims of the same or similar scope as the claims that are being amended. Claim 3 has been cancelled. Claims 1-2, 4-5, 7-13, 15-19, 21-30, and 32-44 remain pending.

Reconsideration of the application is respectfully requested based on the following remarks.

REJECTION OF CLAIMS UNDER 35 USC §103

In the Office Action, the Examiner rejected claims 1-2, 4-5, 9-13, 15, 21, and 32-44 under 35 USC §103(a) as being unpatentable over Dorenbosch et al, U.S. Pub. No. 2005/0048977, ('Dorenbosch' hereinafter) in view of Jeyascelan et al, U.S. Pub. No. 2005/0070275, ('Jeyascelan' hereinafter), and further in view of Kumaran et al, U.S. Pub. No. 2002/0168983, ('Kumaran' hereinafter).

Each of the pending claims triggers roaming of a network device based upon threshold values. Specifically, the speed of the network device is detected, and one or more threshold values at the detected speed are either ascertained (e.g., see claims 1, 20, 32, 33, and 34) or modified (e.g., see claims 21 and 31). Roaming is triggered based upon whether a trigger value meets the threshold value at the detected speed.

Claims 1, 32, 33, and 34 recite, "ascertaining one or more threshold values corresponding to one or more trigger events and the detected speed of the network device." Thus, the threshold values correspond to the detected speed of the network device. For example, as recited in claim 1, the threshold values may be obtained from a profile that includes a plurality of sets of threshold values, where each of the sets of threshold values corresponds to a different set of one or more speeds of a plurality of speeds.

With respect to Dorenbosch, the Examiner asserts:

(‘977 teaches detecting a triggering event, which is the detection of a wireless local area network border cell (210), fig. 2, or a degradation in signal quality (same as ascertaining threshold value, such as signal strength or degradation of quality), refer to para: [0009] and abstract); wherein one or more threshold values have been configured at the network device (‘977 teaches, if the speed and/or displacement of the device exceeds a predetermined threshold (predetermined threshold value is same as configured at the network device), refer to para: [0009]); (It is important to note that this routine is executed periodically which obviously generates profile of values corresponding to speed and events, refer to para: [0037]. ‘977, further, teaches each of threshold values corresponding to different sets of speeds, and triggering events, refer to fig. 8 step 812 and fig. 9 step 912).

Dorenbosch discloses executing a routine periodically, which determines “if the speed and/or displacement information exceeds a predetermined threshold. See para. [0037]. More particularly, Dorenbosch discloses determining if the speed and/or displacement do not exceed a first predetermined threshold. See para. [0039]. Dorenbosch further discloses determining if the speed and/or displacement do not exceed a second predetermined threshold. See para. [0039]. Similarly, Dorenbosch discloses determining if the speed and/or displacement is less than a third predetermined threshold. See para. [0040].

The Examiner further refers to 812 of FIG. 8 and 912 of FIG. 9, which discloses determining whether “speed/displacement greater than second threshold.” Thus, it appears that the “threshold” of Dorenbosch is merely a speed or “displacement.” Nothing in Dorenbosch discloses or suggests that threshold values other than speeds correspond to a set of speeds. More particularly, nothing in Dorenbosch discloses or suggests that each of the sets of threshold values corresponds to a different set of one or more speeds of a plurality of speeds, where the threshold values include maximum data retry count, maximum number of beacons missed, maximum data rate shift, or signal strength, wherein the threshold values do not include one or more speeds, as recited in claim 1. Similarly, nothing in Dorenbosch discloses or suggests wherein each of the

plurality of sets of threshold values corresponds to but does not include a different set of one or more speeds of a plurality of speeds, as recited in claim 10.

The Examiner asserts that Kumaran discloses “wherein the threshold values do not include one or more speeds.” More particularly, the Examiner cites step 86, para. [0057] of Kumaran. Paragraph [0057] discloses:

[0057] FIG. 9 is a flow chart 80 showing how program 30 processes a call maintenance event. In response to such an event 90, the program 30 determines whether the quality of the communication channel that is supporting the call is above a predetermined threshold value (step 82). The quality is determined from a ratio of the signal power delivered by the servicing angular sector S.sub.1-S.sub.k to the participating mobile unit M.sub.1-M.sub.m, or the signal power received from the participating mobile unit M.sub.1-M.sub.m at the servicing angular sector S.sub.1-S.sub.k to the interference power in the channel of the angular sector S.sub.1-S.sub.k supporting the call. The power levels are based on input data on properties of the angular sector S.sub.1-S.sub.k that is servicing the call, properties of the mobile units M.sub.1-M.sub.m, and the fading matrix. The power levels can change, e.g., due to simulated motion of the mobile units M.sub.1-M.sub.m. If the ratio of the relevant signal power to the interference (i.e., noise) power level is above a predetermined threshold, the program 30 maintains the call and creates a future call maintenance event for the call (step 84). If the ratio of the relevant signal power level to the interference power level is below the predetermined threshold, the program 30 marks the call as bad and tries to hand off the call to a different angular sector/base station if the simulation supports handoffs (step 86). If the hand off fails after a selected number of the tries the call is dropped. If the embodiment does not support handoff, the call is simply dropped.

Kumaran appears to disclose a threshold value for the quality of a communication channel. Even if the threshold values discussed in Kumaran do not include speeds, Kumaran fails to cure the deficiencies of Dorenbosch. More particularly, nothing in the cited references, separately or in combination, discloses or suggests that threshold values such as maximum data retry count, maximum number of beacons missed, maximum data rate shift, or signal strength may vary according to the speed of a mobile device. Rather, Kumaran clearly implies that the threshold values do not vary according to the speed of a mobile device. Specifically, Kumaran

refers to a “predetermined threshold” and makes no reference to different thresholds that correspond to different sets of speeds. Therefore, the combination of the cited references, separately or in combination, fail to disclose or suggest “wherein each of the plurality of sets of threshold values corresponds to a different set of one or more speeds of a plurality of speeds,” where the threshold values do not include speeds, as recited in claim 1. In view of the deficiencies of the primary references discussed above, Applicant respectfully asserts that the combination of the cited references would fail to operate as claimed.

As disclosed in the Background section of Applicant’s specification:

“Specific events trigger the roaming of the mobile node to one Foreign Agent or Access Point to another Foreign Agent or Access Point when the mobile node is traveling at relatively low speed (e.g., walking speed). However, at a higher speed, these events do not trigger the roaming process quickly enough. As a result, the Foreign Agent or Access Point via which communications are received by the Mobile Node may be outside the coverage area of the Foreign Agent or Access Point. Accordingly, communications may be disrupted.”

The cited references, separately or in combination, fail to disclose or suggest the problems that may occur when a mobile node is traveling at a higher speed. Similarly, the cited references, separately or in combination, fail to disclose or suggest a solution to these problems.

Accordingly, Applicant respectfully asserts that the claimed invention is non-obvious over the cited references.

Moreover, claim 21 recites, “modifying one or more threshold values” in a profile, as claimed. However, nothing in Dorenbosch or Jeyaseelan, separately or in combination, discloses or suggests modifying one or more threshold values in a profile configured at the network device, as claimed.

Applicant respectfully asserts that the remaining references fail to cure the deficiencies of the primary references. Based on the foregoing, it is submitted that the independent claims are patentable over the cited references. In addition, it is submitted that the dependent claims are also patentable for at least the same reasons. The additional limitations recited in the independent claims or the dependent claims are not further-discussed as the above-discussed limitations are clearly sufficient to distinguish the claimed invention from the cited references.

Thus, it is respectfully requested that the Examiner withdraw the rejection of the claims under 35 USC §103.

SUMMARY

An early Notice of Allowance is earnestly solicited. If there are any further issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 504480 (Order No. CISCP360).

Respectfully submitted,
WEAVER AUSTIN VILLENEUVE & SAMPSON LLP

/Elise R. Heilbrunn/
Elise R. Heilbrunn
Reg. No. 42,649

P.O. Box 70250
Oakland, CA 94612-0250
(510) 663-1100